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ABSTRACT

This study used Australian Bureau of Statistics (ABS) survey data to assess changes in child poverty in Australia between 1982 and 1995-96. The findings suggest a dramatic one-third drop in before-housing child poverty during this period, largely as a result of the very substantial increases in government cash payments to low-income families with children. However, while there have been sharp falls in poverty among dependent children, poverty rates among 15- to 18-year-olds who have left the parental home or who are still living at home but not in full-time study have increased very sharply. In addition, the after-housing poverty rate has changed little, apparently due to a compositional shift in the types of family in after-housing poverty. (Author)

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# TRENDS IN CHILD POVERTY IN AUSTRALIA: 1982 TO 1995-96

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**Discussion Paper no. 42**

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Ann Harding and Aggie Szukalska

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## Abstract

This study uses ABS income survey data to assess changes in child poverty in Australia between 1982 and 1995-96. The results suggest a dramatic one-third drop in before-housing child poverty during this period, largely as a result of the very substantial increases in government cash payments to low income families with children. However, while there have been sharp falls in poverty among dependent children, poverty rates among 15–18 year olds who have left the parental home or who are still living at home but not in full-time study have increased very sharply. In addition, the after-housing poverty rate has changed little, apparently due to a compositional shift in the types of family in after-housing poverty.

## Author note

Ann Harding is the inaugural Director of NATSEM and Professor of Applied Economics and Social Policy at the University of Canberra. Aggie Szukalska is a Research Assistant at NATSEM.

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## General caveat

NATSEM research findings are generally based on estimated characteristics of the population. Such estimates are usually derived from the application of microsimulation modelling techniques to microdata based on sample surveys.

These estimates may be different from the actual characteristics of the population because of sampling and nonsampling errors in the microdata and because of the assumptions underlying the modelling techniques.

The microdata do not contain any information that enables identification of the individuals or families to which they refer.

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# 1 Introduction

Child poverty is almost universally regarded as an important issue. There is concern about both the immediate and the future negative effects of poverty on children. Research suggests that children living in poor families are more likely to, for example, have difficulty in school, become teen or sole parents, gain fewer educational qualifications and, as adults, earn less and be unemployed more (Federal Interagency Forum on Child and Family Statistics 1998, p. 10; Rodgers and Pryor 1998).

There is a perception in Australia that both income inequality and poverty have increased in recent years (Borland and Kennedy 1998; Harding 1997; Saunders 1998a). Yet, since the early 1980s, successive Australian governments have made substantial changes to the social welfare system in an attempt to direct more money to families with children. Have these efforts really been so unsuccessful?

This study examines trends in child poverty from 1982 to the mid-1990s, using the income survey data issued by the Australian Bureau of Statistics (ABS). A number of amendments were made to the data of both surveys to make them more comparable and these, plus further detail about the methodology, are described in section 2. Section 3 provides an overview of the results. Section 4 analyses in more detail the characteristics of the families of children in before-housing poverty. Section 5 looks at the after-housing poverty picture, which shows much less improvement than the before-housing picture. The main conclusions are presented in section 6.

# 2 Defining poverty

Australians generally do not suffer the severe material deprivation evident in some developing countries. This affects our definition of poverty. For us poverty applies not only to individuals without food or shelter, but also to those whose living standards fall below some overall community standard. This *relative poverty* definition underpins most estimates of the number of Australians in poverty (ABS 1998).

There is no universally accepted measure of poverty. All of the decisions made by analysts in defining and measuring poverty are highly debateable.

## 2.1 The indicator of resources

How well off are we? Quality of life can be measured by the things that we own, our ability to afford shelter, the safety of our neighbourhoods, our health and nutrition, as well as our incomes. Like the majority of Australian studies, this study uses the disposable (after income tax) cash income of a family as the indicator of their standard of living. However, as noted above, it must be acknowledged that income is an imperfect proxy for the standard of living achieved by families. For example, the consumption or expenditure of a family may be viewed as a more reliable guide to their standard of living. A family may smooth consumption across years or even across the life cycle by dissaving during periods of low income and saving during periods of higher income. In addition, for groups suspected of being able to arrange their affairs so as to reduce their reported income — for example, the self-employed and millionaires (Bradbury 1996) — consumption may provide a better indicator of economic resources than income.

Furthermore, non-cash benefits are not included within the 'cash income' measure of resources. Non-cash benefits arise from the use of government funded or subsidised welfare services, such as education and health. Previous research has shown that families with children receive higher than average non-cash benefits, so that including such benefits within the measure of resources might change the poverty picture (Harding 1995, p. 76; Johnson, Manning and Hellwig 1995; Johnson 1998; Smeeding et al. 1993). Yet including non-cash benefits in the poverty measure is not straightforward (Landt and King 1996, p. 5).

More comprehensive measures of economic wellbeing may change the story about which groups are most in need. Travers and Richardson (1993), for example, found only a weak correlation between those who were 'poor' on the cash income poverty measure and those who were 'poor' using fuller income measures. Nonetheless, access to cash income remains one of the key benchmarks used in studies of poverty and inequality.

## 2.2 Equivalence scales

Although the use of equivalence scales is fraught with controversy, there is little choice but to use such scales in poverty analysis. It is unlikely that, for example, a single person with an income of $19 000 suffers from the same degree of poverty as a couple with four children on the same income. A way therefore has to be found to define poverty levels for families of different composition. Typically a poverty line is defined for a benchmark family type, such as an individual or a couple without children, and then equivalence scales are used to determine comparable poverty lines for other types of family.

Results can vary greatly depending on the equivalence scale used. Two equivalence scales are used in this study. The first, the detailed Henderson equivalence scale, has been widely used in Australia. This equivalence scale was derived from a survey of household budgets and costs in New York in the 1950s. The second is the OECD scale, which has been widely used internationally. The Henderson equivalence scale gives a weight of one to the first adult in the unit, 0.56 to a second adult, and 0.32 for each child, while the OECD equivalence scale carries a weight of one for the first adult in the unit, 0.7 for a second adult, and 0.5 for each child. Thus, the OECD scale gives a higher weighting to the needs of the second adult and to children.

In line with recommendations made by a review committee in 1996, in applying the Henderson scales we have given dependent children aged 18 years and over the same weighting as a spouse (that is, they have been treated as adults rather than children). In addition, there is a slight difference in the way that we have defined 'working' for the purpose of assigning equivalence scale points. The original Henderson approach assigned the higher 'working' points to people who were either working full-time or unemployed and looking for full-time work. In this study, the 'working' points have also been assigned to those who are working part-time and to those who are unemployed and looking for part-time work.

The OECD scale does not vary with the labour force status of the adults or the ages of the children or the adults.

## 2.3 The income unit

The income unit is the group between whom income is assumed to be equally shared. Possible income units include the individual, the nuclear family, a more extended family, and the household. The precise income unit used can make a major difference to poverty estimates. For example, if a single unemployed 18 year old male still living in the parental home is regarded as a separate income unit, then he is likely to be in poverty. Conversely, if he is regarded as part of the parental income unit, he is much more likely not to be in poverty.

In this study we employ the ABS definition of the income unit — a couple without dependent children, a couple with dependent children, a sole parent with dependent children, or a single person — but subsequently use the term 'family' to refer to the unit. A dependent child is defined as a child aged less than 15 years or a 15–24 year old in full-time study and still living in the parental home. In other work we have looked at the difference made to child poverty estimates by treating non-dependent children still living with their parents as part of the parental income unit (Harding and Szukalska 1998).

Having defined the income unit, a decision needed to be made about whether to attribute income to the income unit or to each individual living in that income unit. For example, if the total income of a family consisting of husband, wife and two children is below a poverty line, does this mean that one family is in poverty or that four individuals are in poverty? This study deals with the number of children in poverty, so each child in a family has been ascribed the income of their family (that is, the results are child weighted — not family weighted).

## 2.4 The data and the period

This report uses data from both the 1982 Income and Housing Survey and the combined 1994-95 and 1995-96 Survey of Income and Housing Costs confidentialised unit record files, issued by the ABS. The 1982 income survey contained individual records for 31 723 people aged 15 years or more belonging to 20 117 income units, while the 1994–96 survey contained files for 27 844 people aged 15 years or more belonging to 17 540 income units.

All records are weighted, so that the results can be grossed up to arrive at estimates for the whole population. The 1982 weights were constructed by NATSEM after concerns about the accuracy of the weights attached by the ABS to the original file (Harding 1993). The 1994–96 weights were constructed by the ABS. The scope of the 1994–96 survey was limited to people living in private dwellings. In contrast, the 1982 survey included people living in 'special dwellings' such as boarding houses and religious and educational institutions, so those living in such dwellings were excluded from the analysis.

The 1982 survey was conducted between September and November 1982, while the 1994–96 survey was conducted monthly throughout the two financial years 1994-95 and 1995-96, but estimates in 1994-95 were 'aged' by the ABS to 1995-96 levels. While the earlier 1982 survey was conducted as a special survey at a particular point in time, the later survey was added onto the ABS Monthly Population Survey. In theory, this should not have affected the results. However, in practice it appears that there are problems with the annual income data in the 1994–96 survey, with the failure to exclude people whose circumstances had changed radically resulting in too many people with very low or no annual income. As a result, all of the following figures are based on current weekly income rather than annual income estimates.

Income is defined as 'regular cash receipts' and includes wages and salaries, business and investment income, and government cash transfers such as pensions and family allowances. In 1982 the ABS reset negative investment and business incomes to zero, before adding them to other income sources. To make the 1995-96 data comparable, such negative incomes were also reset to zero and then gross incomes were recalculated. Another problem is that the incomes of all 15–20 year old dependent children in the 1982 survey were not recorded (so that, effectively, they were set to zero). It was not easy to decide the best way to make the 1995-96 data comparable. It is possible, for example, to reset the incomes of all 15–20 year old dependants in the 1994–96 survey to zero but, because more children are remaining at home now for extended periods and because a higher proportion of them are in part-time jobs and earning income, the degree of misrepresentation of the true picture introduced by setting all such incomes to zero would be much greater in 1995-96 than in 1982. Ultimately, we decided not to

tamper with the 1995-96 data, while recognising that this would tend to very slightly overstate any reduction in poverty between the two years.

Finally, in the 1994–96 survey all children aged 15–24 years old and in full-time study were counted as dependants while, in the 1982 survey, the cut-off point was 20 years. To make the data comparable, those 21–24 year old full-time students regarded as 'not dependent' in 1982 were identified and added back into their parent's income unit. In 1982 income tax was imputed by NATSEM while in the later data income tax was imputed by the ABS.

The available data dictate the period of the analysis, which essentially captures poverty during a single week. It is likely that longer periods could result in a different impression of the types of children at greatest risk of poverty, and we hope to look at this issue in more detail later this year, using the ABS longitudinal Survey of Employment and Unemployment Patterns data.

## 2.5 The poverty lines

The apparent magnitude of poverty is critically dependent on where the poverty line is drawn. In Australia today, this is essentially an arbitrary decision, in that we do not have recent data to tell us exactly how much income different types of family need to have in order to not be in poverty. The budget standards project being carried out by the Social Policy Research Centre at the University of New South Wales is providing a guide to the amount of income required to finance a 'low cost' standard of living, but the results are not regarded by them as providing a poverty line benchmark (Saunders 1998b). In this report we describe poverty using the 'head count' approach, which shows the number of children living in families whose incomes fall below a specified poverty line and we use four different poverty lines.

### *The Henderson poverty line*

The Henderson poverty line has been traditionally used in much Australian research. However, we have major concerns about the way the line has been updated over time to match changes in community incomes (Saunders 1996, p. 333; Mitchell and Harding 1993). As King

(1998) recently noted, the Henderson poverty line would now be about 15 per cent lower if the updating method had been amended to take into account the most commonly expressed concerns about it.

According to our analysis, in 1982 the Henderson poverty line amounted to 51.4 per cent of average income. By 1995-96 it amounted to 59.5 per cent of average income. Thus, the reason why the Henderson poverty line is producing a picture of an 'ever-rising tide' of poverty is because it is set at an ever-rising proportion of family income. Presumably, if the current indexing methodology continued unchanged, the Henderson poverty line could reach 70 per cent of average incomes in some 15 years time, which would result in about one-third of Australians being in 'poverty'.

### *Half median poverty line*

The half median poverty line, one which is widely employed internationally, is set at *half of the median equivalent family disposable income* of all Australians. Note that using this poverty line means that we are comparing the living standards of children with the living standards of all Australians. (An alternative would be to develop a *child median* poverty line, based on the family incomes of children only (Bradbury and Jantti 1998). In this case, poor children would be those who had much lower living standards than other children rather than those who had much lower living standards than Australians generally.) This poverty line still uses the detailed Henderson equivalence scale to calculate the relative needs — and thus the equivalent income — of different types of family. Because the Henderson equivalence scale has been used, this poverty line can be viewed as being exactly the same as a poverty line drawn at 73 per cent of the usual Henderson poverty line in 1995-96.

### *Half average poverty line*

The half average poverty line is similar to the half median poverty line, but is set at *half of the average equivalent family disposable income* of all Australians. There are some concerns about the adequacy of the median as a benchmark for community incomes in a world where there has been strong growth in incomes at the top end of the income distribution

(Harding 1997) although, interestingly, our analysis suggests that the half average and the half median poverty lines have moved very much in tandem since 1982 (see table 1).

This poverty line also uses the Henderson equivalence scale, so differs from the half average income poverty line only in that it uses 'half average income' rather than 'half median income' to set the poverty line. As it happens, this poverty line is about 15 per cent lower than the Henderson poverty line, so it provides a reasonable guide to what measured poverty would be now if the method of updating the Henderson poverty line were improved.

### *The OECD poverty line*

A fourth poverty line was used to match many international studies, drawn at half the median equivalent family disposable income but using the *OECD equivalence scale* rather than the Henderson equivalence scale. This poverty line thus captures the effect of those different assumptions about the relative needs of children and adults that are implicit in the different equivalence scale.

### *Accounting for housing costs*

A final issue is whether to measure poverty before or after families have paid their housing costs. Home purchasers and private renters usually have higher housing costs than do outright home owners and public renters. People with similar low incomes may thus have quite different living standards if their housing costs are very different (King 1998). To overcome this, the Henderson poverty line includes two sets of poverty lines: before and after housing. To derive after-housing poverty estimates, the housing costs of families are deducted from their after-tax incomes and the results compared with the corresponding after-housing poverty line. Although the other three poverty lines described above are normally applied to before-housing income — and it is not entirely clear that they can be validly used on an after-housing basis — they are also applied to after-housing income later in this study.

# 3 Overview of results

## 3.1 Aggregate child poverty estimates

Poverty rates are like snapshots; they describe the percentage of people who are poor at a specified point in time. But, as already noted, the extent of child poverty depends on where the poverty line is drawn. The Henderson poverty line in the last quarter of 1982 for a couple with a working head, a non-working spouse, and two children was $187 a week ($369 in 1995-96 dollars), while in 1995-96 it was $434. This is after the payment of income tax, but before housing costs are met. Using this poverty line, an estimated 19.5 per cent in 1982 and 24.2 per cent in 1995-96 of all dependent Australian children[1] were in poverty (table 1). That represents an increase of almost 25 per cent in child poverty during these 13 years (figure 1). These results thus echo the findings of other studies that have used the Henderson poverty line and found a marked increase in poverty (Saunders 1998a).

Table 1 **Estimates of child poverty using four different poverty lines, December quarter 1982 and 1995-96**

| | Unit | Henderson | | Half average | | Half median | | OECD | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 |
| **Level of poverty line** | | | | | | | | | |
| In current dollars | $ pw | 187 | 434 | 182 | 365 | 162 | 320 | 170 | 341 |
| In 1995-96 dollars[a] | $ pw | 369 | 434 | 359 | 365 | 319 | 320 | 335 | 341 |
| **Poverty estimates** | | | | | | | | | |
| All dependent children | | | | | | | | | |
| Rate | % | 19.5 | 24.2 | 18.2 | 12.5 | 13.6 | 8.0 | 15.9 | 10.0 |
| Number | '000 | 810 | 1 163 | 759 | 598 | 544 | 388 | 663 | 491 |
| All children under 15 | | | | | | | | | |
| Rate | % | 20.0 | 25.3 | 18.7 | 13.0 | 13.2 | 8.5 | 16.5 | 11.0 |
| Number | '000 | 700 | 996 | 657 | 514 | 464 | 335 | 579 | 433 |
| All persons under 19[b] | | | | | | | | | |
| Rate | % | 20.0 | 26.4 | 19.0 | 14.5 | 14.0 | 11.0 | 17.0 | 12.0 |
| Number | '000 | 912 | 1 294 | 860 | 712 | 638 | 433 | 764 | 595 |

[a] The 1982 poverty lines have been expressed in 1995-96 dollars using the consumer price index to take out the effects of inflation. [b] Includes non-dependent children.

*Source*: ABS 1982 and 1994–96 income survey microdata.

1 As noted earlier, dependent children are defined as children aged less than 15 years or aged 15–24, studying full-time and still living with their parents.

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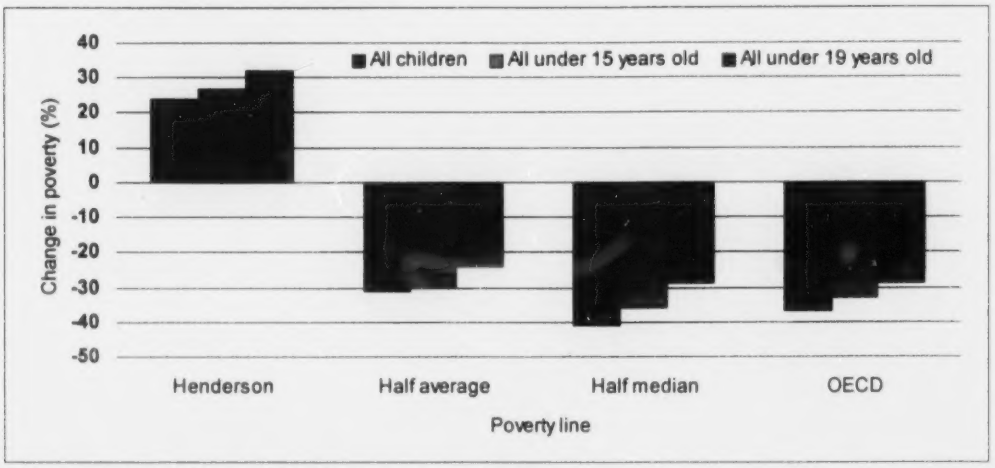
Figure 1 **Percentage change from 1982 to 1995-96 in the proportion of children in poverty**




*Data source*: ABS 1982 and 1994–96 income survey microdata.

Is this a credible result? As noted earlier, there are grounds for believing that the Henderson poverty line has not been appropriately indexed over time to reflect changing community incomes.[2] If half of the family income of the *average* person in Australia in 1982 and 1995-96 is used to set the poverty line, then the line in 1982 was $182 a week ($359 in 1995-96 dollars) while in 1995-96 it was $365 a week. Using this measure, an estimated 18.2 per cent in 1982 and 12.5 per cent in 1995-96 of Australian children were in poverty — a 30 per cent fall in the child poverty rate. The total number of children in poverty fell about 20 per cent from 759 000 in 1982 to about 600 000 in 1995-96.

This poverty line amounts to about 84 per cent of the 1995-96 Henderson poverty line, and is thus close to where experts believe the Henderson poverty line would now fall if the method of updating it were improved.

If the poverty line is set at half of the family income of the *median (middle)* person in Australia, the poverty line was $162 a week in 1982 ($319 in 1995-96 dollars) and $320 a week in 1995-96. This is obviously much

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2 It should be noted here that we are not making any comment about whether the Henderson poverty line provides an appropriate benchmark for measuring poverty in Australia today. The issue is that it produces inaccurate estimates of changes *over time*, because of a flawed method of indexing the poverty line to changes in community incomes.

lower than the Henderson poverty line and, not surprisingly, results in correspondingly lower dependent child poverty rates of 13.6 and 8.0 per cent respectively. This represents a 40 per cent decrease in child poverty between 1982 and 1995-96 (figure 1).

The OECD poverty line is similar to the half median income poverty line in that it draws the poverty line at half of the family income of the middle person in Australia. However, it uses an entirely different equivalence scale from that used in the first three poverty lines considered, so is not directly comparable. Nonetheless, the resulting poverty line for a couple with two children was $170 a week in 1982 ($335 in 1995-96 dollars) and $341 a week in 1995-96, which means that it falls between the previous two poverty lines (table 1). Thus, using the standard approach used to construct OECD poverty league tables, child poverty in Australia fell by more than one-third — from 16 per cent in 1982 to 10 per cent in 1995-96.[3]

So before-housing poverty lines set at consistent proportions of average or median income paint a picture of a dramatic fall in child poverty since the early 1980s. The Henderson poverty line, set at an ever-rising proportion of family income, stands alone in producing an equally dramatic increase in child poverty (figure 1). Are the apparent sharp falls in poverty suggested by the first set of measures credible?

### 3.2 Increases in family assistance

Since the early 1980s major reforms in the area of assistance for families with children have been implemented every couple of years. At the beginning of the 1980s, only social security pensioners (including sole parents) and longer term sickness beneficiaries received rent assistance, while only social security pensioners and beneficiaries received additional payments for their children. Low income working families

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[3] These results are very different from those presented in Bradbury and Jantii (1998), who found a small increase in child poverty in Australia between 1981-82 and 1994-95 using a similar poverty line and equivalence scale. However, this may be because they used annual income data and, as already mentioned, there is a major problem with the new ABS annual income survey data, with too many income units having zero or low income. The same problem applies to other studies of poverty or inequality based on the 1994-95 or 1995-96 ABS annual income survey data.

with children received only a relatively small family allowance payment. The social security landscape is now radically different.

The family income supplement was introduced in May 1983 to provide extra assistance for low income working families with children. Following the famous pledge by the then Prime Minister, Bob Hawke, in the 1987 election campaign that no Australian child would live in poverty by 1990, a single *family allowance supplement* was introduced for all low income families with children, with substantially increased payment levels. This was again revamped under the Keating Government and payment rates were raised further. Similarly, after a series of policy changes over a number of years, *rent assistance* was extended to all recipients of sickness allowances, to most unemployed people and to low income working families with children in the private rental market.

To fully appreciate the scale of these changes, let us look at the Browns, a hypothetical family. Mr Brown works for a low wage, Mrs Brown looks after their two young children, and they rent their home. In late 1982 the Browns received just under $13 a week in family allowance — about $25 a week in 1995-96 dollars. In contrast, in January 1996 a family like the Browns would have received $93.10 in family payment and up to $40 a week in rent assistance. To put this into perspective, such a family would have received assistance worth about 4 per cent of average weekly ordinary full-time earnings in November 1982, but 20 per cent of such earnings in early 1996. We are thus talking about very major changes in the amount of assistance available to low income working families with children.

It was not just working families that benefited from these sharp increases in assistance for families with children. Table 2 shows the payments received by unemployed couples and sole parents with children in November 1982 and January 1996. Such families benefited not only from the new package of family assistance but also from real increases in the basic rate of pension or allowance. By 1996 unemployed couples with two children, for example, were receiving an extra $86 a week if they were renting privately and $47 a week if they were not (after taking full account of the effects of inflation). Similarly, a sole parent pensioner with two children was receiving an extra $64 a week if renting privately and $45 a week if in another type of housing tenure.

Table 2 **Real payments received by social security recipients in November 1982 and January 1996** In January 1996 dollars

| | Unemployed couple | | | Sole parent | | |
|---|---|---|---|---|---|---|
| | 1 child | 2 children | 3 children | 1 child | 2 children | 3 children |
| | $ pw | $ pw | $ pw | $ pw | $ pw | $ pw |
| **Private renters** | | | | | | |
| November 1982 | 291.32 | 326.73 | 365.15 | 219.43 | 254.84 | 293.26 |
| January 1996 | 366.45 | 413.00 | 465.15 | 272.65 | 319.20 | 371.35 |
| Real change | 75.13 | 86.27 | 100.00 | 53.22 | 64.36 | 78.09 |
| **Not private renters** | | | | | | |
| November 1982 | 291.32 | 326.73 | 365.15 | 199.21 | 234.62 | 273.04 |
| January 1996 | 326.75 | 373.30 | 419.85 | 232.95 | 279.50 | 326.05 |
| Real change | 35.43 | 46.57 | 54.70 | 33.74 | 44.88 | 53.01 |

*Data source*: Calculated from Department of Social Security annual reports.

Many social security recipients are clustered in the income ranges where poverty lines are drawn. This was clearly demonstrated in table 1, as the apparent rate of child poverty changed greatly as the poverty line moved up or down slightly. The increases in payment rates shown in table 2 have drawn many families with children dependent on social security out of poverty. For example, an unemployed couple with two children and with no income apart from the unemployment allowance was below the 'half average income' poverty line in 1982. By January 1996 they were above it, even if they were not receiving rent assistance. Similarly, a sole parent pensioner with two children not renting privately was under the 'half median income' poverty line in 1982 but above both this line and the even higher 'half average income' poverty line by 1996.

These findings were to some extent anticipated. The possible impact of the Family Package on child poverty in the longer term was extensively researched in the late 1980s and early 1990s (Brownlee and King 1989; King 1991; Saunders and Whiteford 1987). Researchers then argued that the Family Package would make a substantial contribution to the alleviation of poverty among families with children, particularly low income families.

Since its election in 1996 the Howard Government has introduced the Family Tax Initiative. Although the impact of this initiative is not

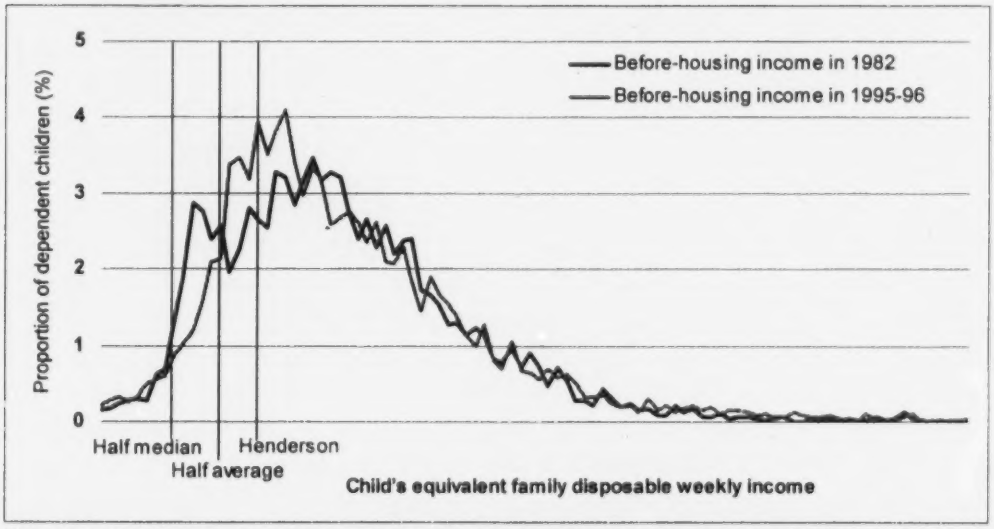
reflected in the 1995-96 ABS survey data used in this study, these payments could have had a further impact on child poverty.

### 3.3 The changing income distribution

Figure 2 shows the distribution of dependent children by their equivalent family incomes in 1982 and 1995-96, along with three poverty lines in 1995-96. Figure 2 illustrates clearly the clustering of children in the lower income ranges, which in turn again emphasises why the child poverty rate falls so sharply as the poverty line moves down.

The major peaks on the graph in these poverty line ranges represent social security recipients with little or no private income. The main social security payments range between about 85 and 120 per cent of the poverty lines, depending on the type of payment and the particular circumstances of individuals. The jagged pattern of the graph reflects particular payments received by a large number of families. About 70 per cent of the families of the children in the peaks at the lower end of

Figure 2 **Estimated distribution of dependent children by their before-housing equivalent family disposable weekly incomes, 1982 and 1995-96**




*Note*: All those who were not dependent children have been excluded from this population distribution. The figure shows the family incomes of only dependent children. The half median, half average and Henderson poverty lines are for 1995-96.

*Data source*: ABS 1982 and 1994-96 income survey microdata.

the income distribution in both years were couples with children and 30 per cent were single parents.

It is clear from the figure that the group of children concentrated in the first income 'peak' in the 1982 line have moved up the income distribution as, by 1995-96, that first 'peak' had disappeared. It is the movement of this large group of children (and their families) to above the relevant poverty lines that is driving the perceived fall in before-housing child poverty.

### *Poverty gaps*

The head count measures of poverty are notoriously sensitive to small movements in the poverty line. Many consider an equally important measure of poverty to be the 'poverty gap'. This measures the depth of poverty, and shows how far below the poverty line those families who are in poverty are. Using the half average income poverty line, our analysis suggests a very slight real decrease in the depth of before-housing child poverty between 1982 and 1995-96. In 1982, children with family incomes below the half average income poverty line were on average $122 a week below that poverty line (expressed in 1995-96 dollars). By 1995-96 they were $116 a week below the same poverty line. Looked at another way, in 1982 those children in poverty were in families whose incomes were 31 per cent below their poverty line on average; by 1995-96 children in poverty were in families whose incomes were 30 per cent below their poverty line. Although this might be contrary to what many people might have expected, many of those close to the poverty line would have been moved above it due to the social security increases. Thus it is not necessarily true that the average poverty gap fell for those still below the line.

### *Looking at younger children*

Many feel that poverty among younger children is more worrying than poverty among older children, who potentially can earn an income and look after themselves. Using the Henderson poverty line, in 1982, 20 per cent of all children under 15 years of age were in poverty (table 1). By 1995-96 the proportion was 5 percentage points higher. The picture looks different when the more reliable half average income poverty line is

used. In 1982, 19 per cent of such children were in poverty (about 657 000 children), while in 1995-96 the figure was 13 per cent. This amounts to a 30 per cent drop in poverty among 0–14 year old children.

*Looking at all children aged 15–18 years*

What about older children? A problem with the most figures presented in table 1 is that they apply to only dependent children. In looking at 'children', it is not clear when a child becomes an adult and should thus be included in estimates of adult poverty. As an interim measure, this section looks at the poverty risks faced by all children aged 15–18 years.

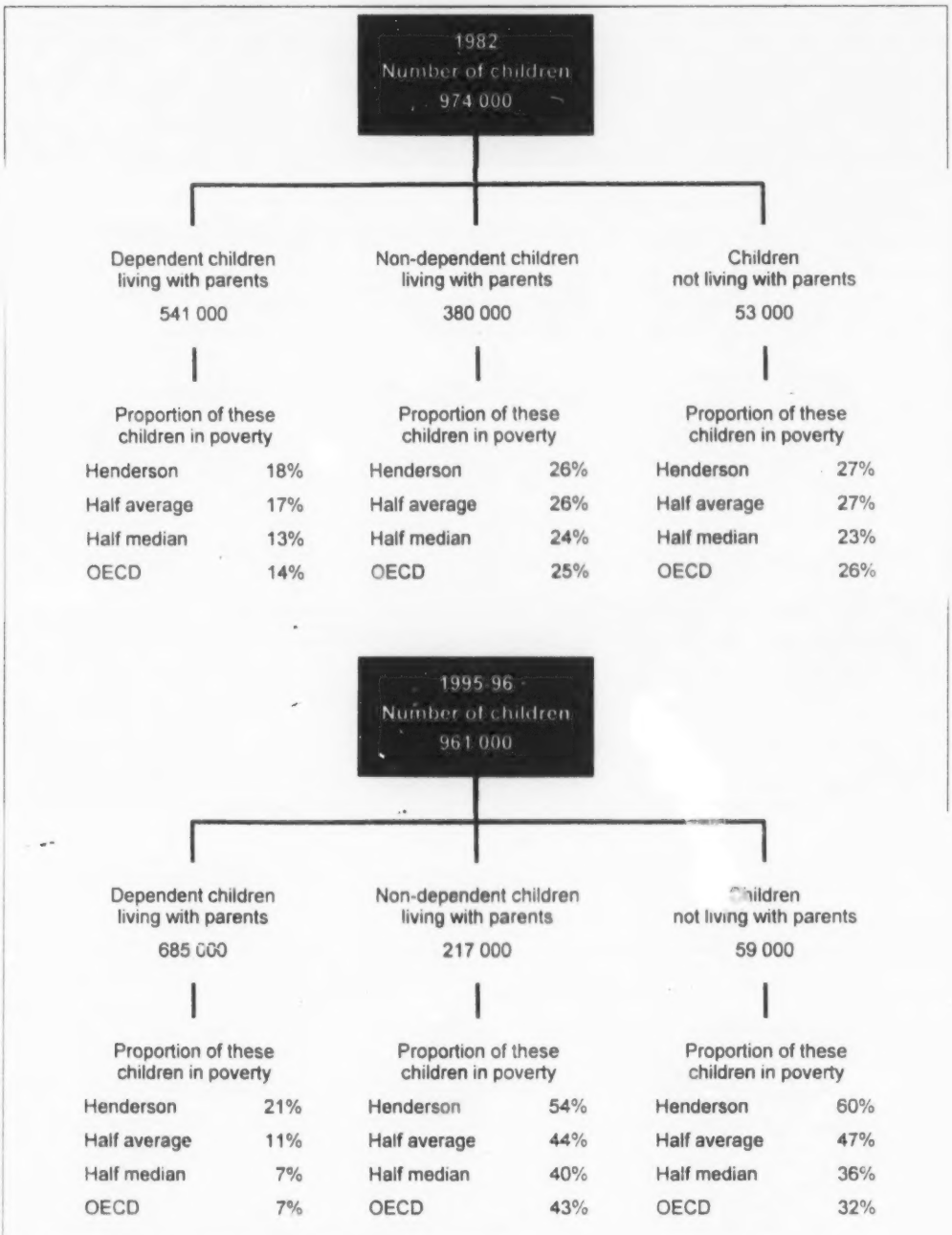
As figure 3 shows, according to the ABS data in both years there were just under one million 15–18 year olds living in private dwellings. In 1982 just over half of those children were dependent children still studying full-time and living with their parents. In 1995-96 their number was higher — about two-thirds of the total number of 15–18 year olds.

Of the three groups presented in figure 3, in both 1982 and 1995-96 the dependent children studying full-time and living with their parents faced the lowest poverty risk. Using the half average income poverty line, in 1982 about 17 per cent of such children were in poverty. In 1995-96, however, the poverty rate among this group was 11 per cent — a 35 per cent decrease. This corresponds to a fall in the total number of such children in poverty from nearly 92 000 in 1982 to just over 75 000 in 1995-96.

In 1982 a further third and in 1995-69 a further fifth of all 15–18 year olds were living with their parents but were classified by the ABS as non-dependent children because they were not in full-time study (for example, they were unemployed, working or not in the labour force). Thus, the figures point to the sweeping changes in the labour market for youths during the past two decades, with many such 15–18 year olds shifting from work or unemployment to full-time study (Landt and Scott 1998).

In 1982 the apparent poverty rates of this group were substantially higher than those of dependent children who also lived with their parents. But by 1995-96 non-dependent children still living with their

Figure 3 **Estimated poverty rates among 15–18 year old children, 1982 and 1995-96**




*Data source*: ABS 1982 and 1994-96 income survey microdata.

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parents were facing a poverty risk that was four to five times that of dependent children. This startling change presumably reflects the decline in the real value of unemployment benefits for young people living at home, as well as the shift from full-time to part-time jobs. This picture of extreme poverty risk may not be all it seems, of course, because the low incomes of this group may disguise very substantial transfers from their parents. Such transfers may include food and very probably include accommodation and some clothing. Despite this, low income is presumably a very important issue for those young adults who are unemployed or have managed to find only part-time work.

Finally, about one in every twenty 15–18 year olds had left the parental home. This means that the sample size for this group was reasonably small and so the estimates should be treated with some caution. With this caveat in mind, it is striking that while poverty rates have fallen for dependent children since the early 1980s, they have increased sharply for those 15–18 year olds not living with their parents. For example, using the half average income poverty line, in 1982 just over one-quarter of those 15–18 year olds who had left their parental homes were in poverty. But by 1995-96 this had increased to almost half. While it is probably true that some of this group still received assistance from their parents, the data still appear to suggest a very high level of disadvantage.

Estimates of the child poverty rate for *all persons aged 18 years or less* can also be calculated (not just for dependent children). According to the ABS, there were 4.5 million children aged 0–18 years in Australia and living in private dwellings in 1982 and 4.9 million in 1995-96. Using the half average income poverty line, an estimated 19 per cent of these children were living in poverty in 1982 (table 1). In 1995-96 the proportion was 15 per cent. This corresponds to the fall in the total number of 0–18 year olds in poverty from 860 000 in 1982 to 712 000 in 1995-96 (table 1).

However, as the earlier analysis made clear, this result reflects the sharp fall in before-housing poverty among dependent children. The even sharper increase in poverty among the much smaller number of 15–18 year olds who were no longer dependent on their parents was disguised by the improvement in the results for dependent children.

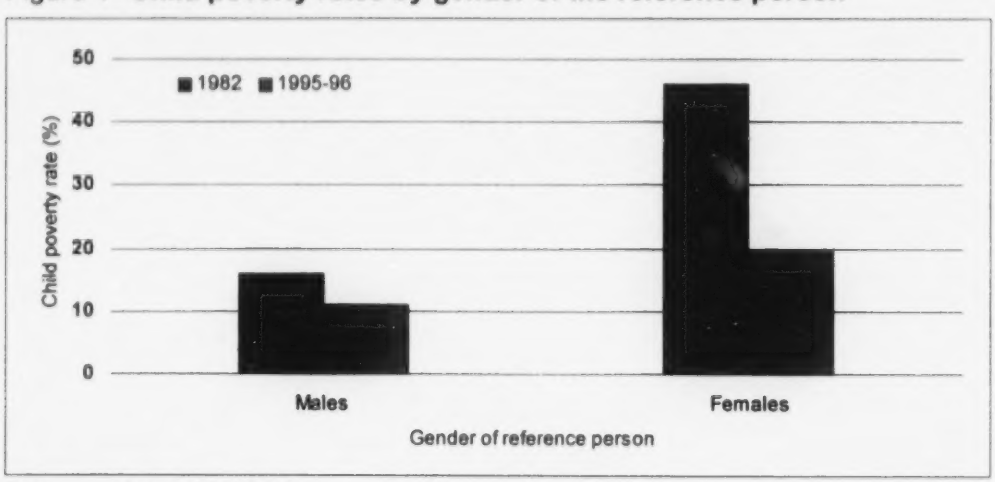
# 4 Characteristics of children in poverty

There were substantial changes between 1982 and 1995-96 in the poverty risks faced by different types of children. This section deals with only dependent children — that is, those still living with their parents and who meet the ABS definition of dependency. The discussion in this section concerns the results for only the before-housing half average income poverty line. The full results for all of the four poverty lines are in appendix A.

The extent to which poverty has a female face has changed greatly since 1982. Then children who lived in a family headed by a woman were almost three times as likely to be in poverty as those in a family headed by a man (figure 4). By 1995-96 they were less than twice as likely to be in poverty, reflecting the substantial increases in social security payments made to sole parents and the changes in child support arrangements. Yet, because so many more children live in families headed by a man, three-quarters of all children in poverty live in such families.

Most children in poverty in both 1982 and 1995-96 lived with both of their parents (appendix A, table A2). But in 1982 the risk of being in poverty was about three times greater if their mother (or less often, their

Figure 4 **Child poverty rates by gender of the reference person**

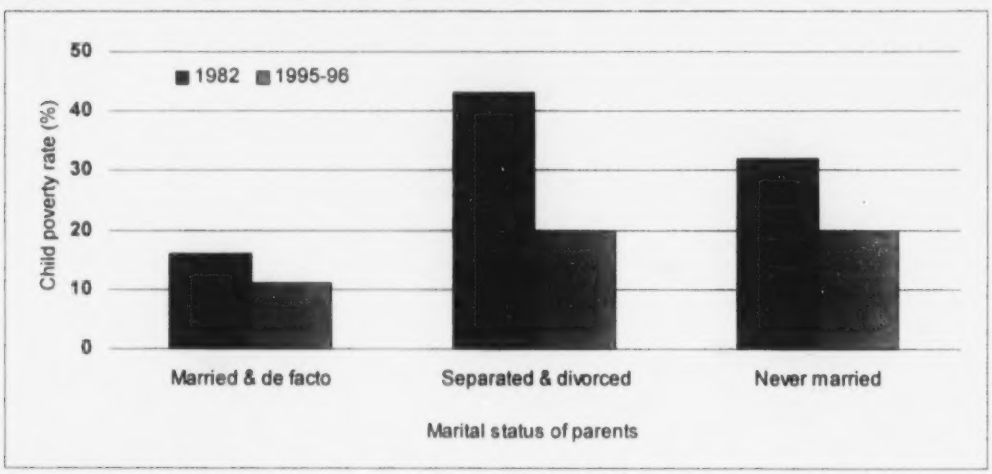



*Data source*: Appendix A, table A1.

father) was a sole parent (figure 5). By 1995-96, however, poverty rates for sole parents had halved, attesting to both the social security payment increases and the growing proportion of sole parents with jobs.

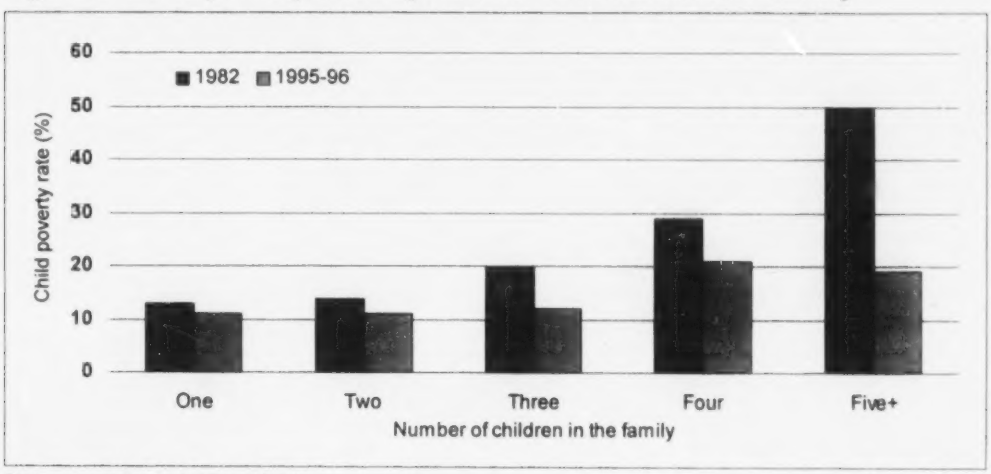
Another very noticeable trend between 1982 and 1995-96 was the fall in the poverty rates of large families, again presumably reflecting the increases in government assistance to such families. While before-housing poverty rates fell for all family sizes, the risk of being in poverty almost halved for families with three children and more than halved for families with five or more children (figure 6).

Figure 5 **Child poverty rates by marital status of parents**




*Source*: Appendix A, table A1.

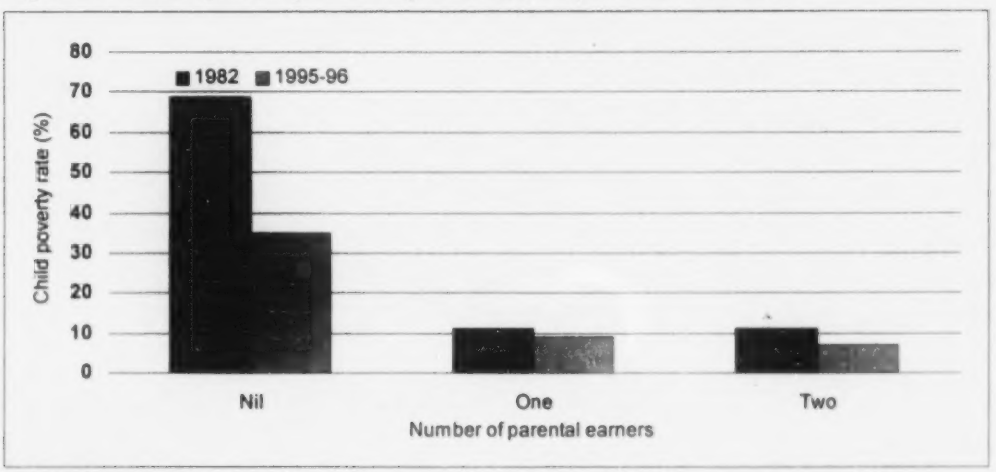
Figure 6 **Child poverty rates by number of children in the family**




*Data source*: Appendix A, table A1.

Perhaps the principal factor influencing the likelihood of a child being in poverty in Australia is the labour force status of their parents. Again reflecting the impact of the social security changes, the chance that a child would be in poverty if they had no parent earning an income in their family almost halved between 1982 and the mid-1990s from 69 to 36 per cent. Despite this decline, the risk of a child being in poverty in 1995-96 was far lower if one or both parents were working — less than 10 per cent (figure 7).

Figure 7 **Child poverty rates by number of parental earners**




*Data source*: Appendix A, table A1.

Perhaps surprisingly, however, the majority of the children living in poverty in Australia do have one or two parental earners in their family — 395 000 compared with 365 000 without a parental earner in 1982 and 311 000 compared with 288 000 in 1995-96 (Appendix A, table A2). Just under two-thirds of such children have at least one parent who is self-employed. As mentioned earlier, while there is no doubt that many self-employed families do experience great financial hardship, there is also some concern that the income of such families may not always accurately reflect their standard of living.

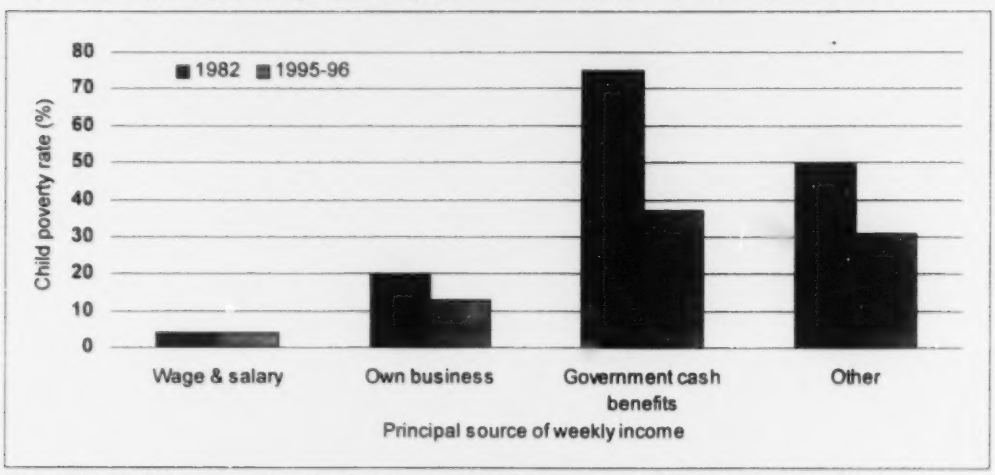
Looking just at children living in families where one or both parents earn wages and salaries, about 134 000 of such children were in poverty in 1995-96.[4] Thus, up to about 25 per cent of poverty among Australian

4 When the number of children living in families where at least one parent earns wage income is added to the number of children living in families where at least

children may be at least partly attributable to the fact that their parents belong to the working poor. For half of these children, their parents are low wage earners as they earn less than $10 an hour. For the remainder, low weekly wages may be more often attributable to a reduced number of hours worked rather than a low hourly wage. In other cases, a reasonable weekly wage may not be sufficient to pull a large family out of poverty, with poverty thus being due more to family size than to a low wage.

Figure 8 again echoes the earlier findings about the profound impact of the social security changes for recipients, with the likelihood that a child living in a family dependent on government cash benefits would be poor falling from 75 per cent in 1982 to just under 40 per cent in the mid-1990s. Yet the proportion of all poor children who lived in families dependent on government cash benefits actually increased from 58 to 64 per cent. The reason for this is quite disturbing, as it reflects the fact that by 1995-96 one-fifth of all Australian children — one million children — lived in families dependent on government handouts. In contrast, in 1982 only 14 per cent of all children — just under 600 000 — lived in

Figure 8 **Child poverty rates by principal source of weekly income**




*Note*: 'Other' includes income from partnerships, superannuation, interest, dividends, bonds and rent.
*Data source*: Appendix A, table A1.

one parent is self-employed, the result is more than the total number of children who live in families with one or two parental earners. The reason for is that some children live in families where one parent is a wage and salary earner and the other is self-employed.

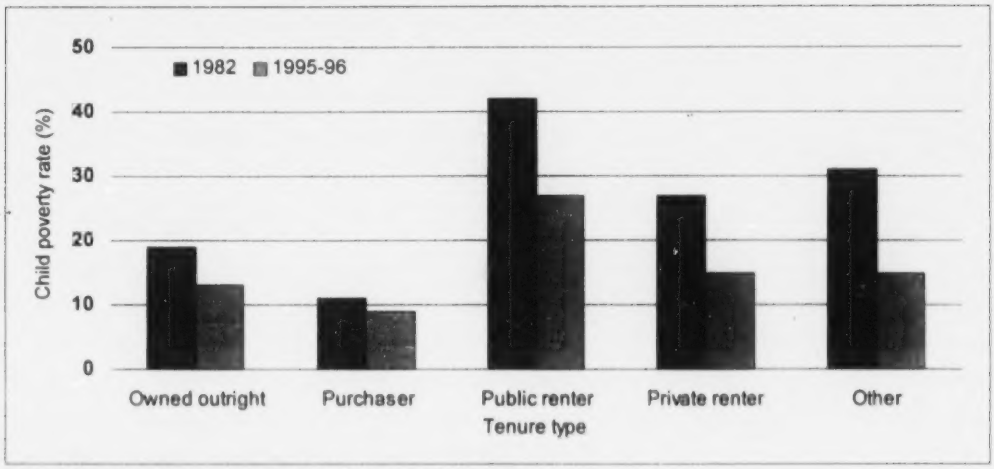
families whose principal income source was government cash benefits. Thus, while the risk of such children being in poverty is now lower, because so many more children now live in that type of family the number of such children in poverty has actually increased.

On the other hand, it should also be noted that there was relatively little change between 1982 and 1995-96 in the number of children living in poor families where at least one parent was self-employed. And yet the proportion of all poor children who lived in families whose *principal source of income* was self-employment income almost halved between the two years. What this indicates is that the new family assistance measures provided many self-employed families with sufficient income to make government cash transfers a more significant income source than their earnings from self-employment. Although such families now appear in the statistics as being dependent on government cash benefits, they are self-employed when categorised by their employment status rather than by their primary income source. Thus the apparent extent of the increase in government dependency is overstated.

The sharp increases in rent assistance during the past 15 years would suggest that the poverty risk faced by those renting from private landlords should have fallen. And this is what we found, with the chance of children living in private rental accommodation being in poverty roughly halving from 27 to 15 per cent (figure 9). Children living in families who rented from public housing agencies still faced a higher risk of being in poverty than those in the other four tenure types examined, at 27 per cent in 1995-96.

Perhaps surprisingly, about one-quarter of all poor children in both 1982 and 1995-96 lived in families who were outright owners of their homes. Another 30 per cent of poor children lived in families who were still paying off their mortgages, so that a slight majority of all poor children lived in families that had already bought or were buying their homes. Further examination of the data, however, suggested that half of the children in the 'owned outright' and 'purchaser' groups were living in self-employed families, which do not reflect the overall average for Australian families.

Figure 9 **Child poverty rates by tenure type**




*Note*: Other includes rent-free and board-free accommodation.
*Data source*: Appendix A, table A1.

## 5 After-housing costs poverty

As noted earlier, another area of continuing debate is the impact of housing costs on poverty rates. The nub of the problem is that home purchasers and private renters typically have higher housing costs than do home owners and public renters. People with similar incomes may thus have quite dissimilar standards of living if their housing costs are very different. There is thus a case for examining poverty rates based on disposable income after housing costs have been met. However, it can also be argued that housing costs are to some extent discretionary and that high housing costs can sometimes represent high levels of saving (via mortgage repayments) rather than high unavoidable costs. There is also some question about whether the 'unavoidable costs' principle should not be extended to other items, such as mandatory child support payments and child care costs (Citro and Michael 1995).

Housing is, however, a very significant component of most families' budgets and a necessity of life. Previous research has shown that using an after-housing measure of poverty is likely to make an important difference to child poverty estimates because couples with children have higher than average housing costs and sole parents have lower than average costs (Landt and King 1996, p. 5).

Suppose we set a poverty line at half of the average *after-housing* equivalent income of families, rather than half of the average *before-housing* income as we have done until now. As table 3 shows, when using half average before-housing income as the poverty line, child poverty plummeted from 18 to 12 per cent. But, using half average after-housing income as the poverty line, child poverty changed little — from 23 per cent in 1982 to 22 per cent in 1995-96.

Table 3 **Estimated before-housing and after-housing child poverty rates**

| Poverty line | All dependent children | | | | Dependent children under 15 | | | |
|---|---|---|---|---|---|---|---|---|
| | Before housing | | After housing | | Before housing | | After housing | |
| | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 |
| | % | % | % | % | % | % | % | % |
| Henderson | 19 | 24 | 19 | 26 | 20 | 25 | 19 | 19 |
| Half average | 18 | 12 | 23 | 22 | 19 | 13 | 24 | 23 |
| Half median | 13 | 8 | 18 | 16 | 13 | 9 | 19 | 16 |
| OECD | 16 | 10 | 19 | 17 | 17 | 11 | 20 | 18 |

*Source*: ABS 1982 and 1994-96 income survey microdata.

Why is this? Understanding why after-housing poverty is higher than before-housing poverty is simpler to explain than why the movements of the two measures were so different during the period being examined. Generally speaking, housing costs as a percentage of disposable income are much higher for low income groups than for high income groups. Moving the definition of resources used to assess poverty from before-housing income to after-housing income thus results in higher income groups looking relatively better off than lower income groups. A poverty line set relative to average after-housing incomes thus results in a higher proportion of children being in poverty.

But why did after-housing poverty fall only slightly between 1982 and 1995-96, while before-housing poverty dropped sharply? One obvious explanation is that the housing costs of those with children living on low incomes increased more rapidly than they did for those living on higher incomes. As table 4 indicates, the real average weekly housing costs of families with children below the half average income poverty line increased by 41 per cent compared with only 22 per cent for those with

Table 4 **Changes in real housing costs and real disposable incomes between 1982 and 1995-96, by whether an income unit has children, tenure and principal source of weekly income**

| | Change in real housing costs from 1982 to 1995-96 | | Change in real disposable incomes from 1982 to 1995-96 | | Housing costs as a percentage of disposable income | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Below poverty line | | | Above poverty line | | |
| | Below poverty line | Above poverty line | Below poverty line | Above poverty line | 1982 | 1995-96 | Change | 1982 | 1995-96 | Change |
| | % | % | % | % | % | % | % | % | % | % |
| **All income units** | | | | | | | | | | |
| Without children | 40 | 45 | 36 | 6 | 62 | 63 | 2 | 9 | 13 | 31 |
| With children | 41 | 22 | 19 | 2 | 42 | 49 | 14 | 12 | 14 | 14 |
| All | 36 | 26 | 17 | 2 | 45 | 52 | 13 | 11 | 14 | 21 |
| **Primary source of weekly income (for those with children only)** | | | | | | | | | | |
| Wages & salaries | 57 | 25 | 7 | 10 | 35 | 52 | 33 | 13 | 15 | 15 |
| Own business | 28 | 15 | 9 | -9 | 44 | 52 | 15 | 9 | 11 | 22 |
| Govt cash benefits | 36 | 91 | 23 | 29 | 41 | 45 | 9 | 11 | 17 | 55 |
| Other[a] | 29 | 12 | 71 | 26 | 82 | 62 | -32 | 8 | 7 | -14 |
| **Tenure type (for those with children only)** | | | | | | | | | | |
| Owner | -7 | 34 | 9 | 4 | 12 | 10 | -20 | 2 | 3 | 33 |
| Purchaser | 32 | 34 | 21 | 8 | 53 | 57 | 7 | 16 | 20 | 20 |
| Public renter | 8 | -14 | -13 | -23 | 22 | 27 | 19 | 15 | 17 | 12 |
| Private renter | 27 | 30 | 16 | -7 | 45 | 49 | 8 | 15 | 21 | 29 |

[a] Other includes income from partnerships, superannuation, interest, dividends, bonds and rent.

*Source*: ABS 1982 and 1994–96 income survey microdata.

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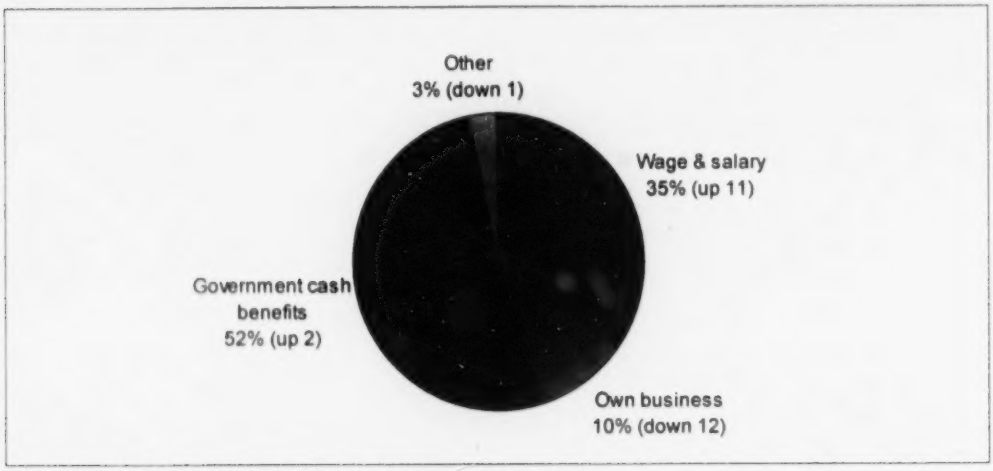
incomes above this line. As the earlier discussion made clear, however, the real disposable incomes of those below this poverty line also increased more rapidly (by 19 per cent) than did the incomes of those above this poverty line (2 per cent). Overall, housing costs amounted to 49 per cent of the disposable incomes of families with children below this poverty line in 1995-96, up from 42 per cent in 1982. For those above this poverty line, housing costs rose from 12 per cent of disposable income in 1982 to 14 per cent in 1995-96.

But the substantial increases in assistance provided to social security recipients were not completely swallowed up by ever-rising housing costs. The average real rent paid each week by the families of children living in private rental accommodation and below the poverty line increased by less than the average rent paid by those living above the poverty line (table 4). And the same was true for home purchasers.

However, the real housing costs of poor wage-earning families with children increased by 57 per cent between 1982 and 1995-96 (table 4). Further analysis showed that just over three-quarters of all those poor children living in wage earning families lived in families that were buying their own home and that the costs for this particular tenure type had increased more sharply than for any of the other tenure types.

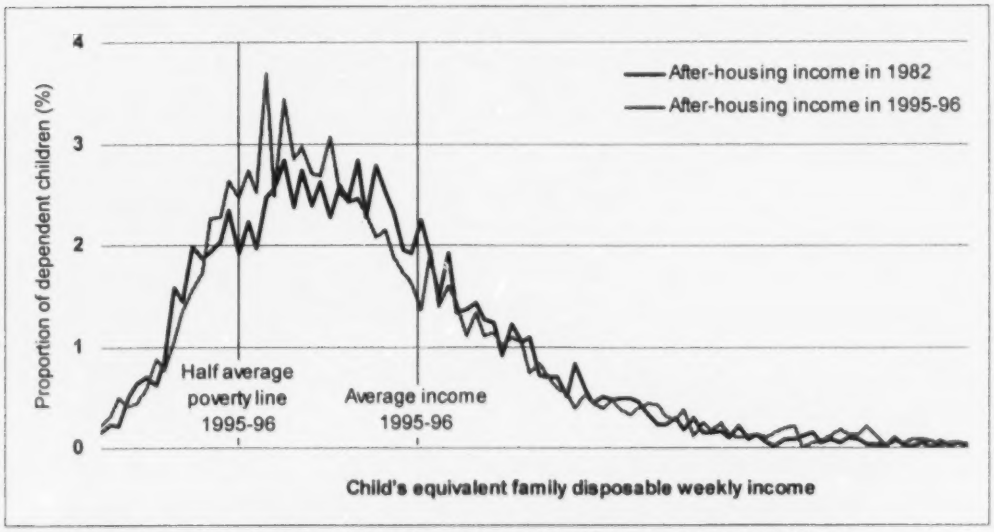
The family characteristics of those children living in after-housing poverty also changed substantially between 1982 and 1995-96, with a sharp increase in the representation of wage and salary families and a decline for self-employed families. For reasons flagged earlier, while the apparent share of after-housing poverty taken by families dependent on government cash benefits remained stable, this was a somewhat artificial result, as it was due to some families shifting out of the 'self-employed' and into the 'government cash benefits' category, simply because government cash benefits became their principal income source and not because their employment status really changed. So the real after-housing poverty story seems to be more one of children living in self-employed and social security dependent families moving out of poverty and the working poor moving in (figure 10) (see also Eardley 1998). And it appears that these new working poor entrants had higher housing costs than the social security recipients that they replaced, mainly because they were buying their own home and had relatively high mortgage repayments.

Figure 10 **Principal family income sources of children in after-housing poverty in 1995-96 (and percentage point change since 1982)**




*Source*: ABS 1982 and 1994–96 income survey microdata.

Figure 11 **Estimated distribution of dependent children by their after-housing equivalent family disposable weekly incomes, 1982 and 1995-96**




*Note*: Those who were not dependent children have been excluded from this population distribution.
*Data source*: ABS 1982 and 1994-96 income survey microdata.

Figure 11 points again to major changes in the distribution of children according to their families' after-housing equivalent incomes. By the mid-1990s more children's families appeared to have after-housing incomes that were around poverty line levels or a little higher, while

fewer had after-housing incomes slightly below the average family income level for all Australians. The 1995-96 after-housing half average income poverty line is reasonably close to the highest 'peak' in the distribution. Some hundreds of thousands of children live in families with incomes in this 'peak'. Like the before-housing measures, the after-housing poverty measure in 1995-96 is very sensitive to slight movements in the poverty line. Analysis of the characteristics of the families of those children in this peak in 1995-96 indicates that three-quarters were couples with children and one-quarter were sole parents. Two-fifths were families with wages and salaries as their primary income source, while half were families dependent on government cash benefits.

## 6 Summary and conclusions

This study has reported changes in the extent of child poverty in Australia between 1982 and 1995-96 using four different poverty lines. The Henderson poverty line produced a picture of an ever-rising tide of poverty, but this is because it is set at an ever-rising proportion of community incomes. The three other poverty lines, which are set at constant proportions of community incomes, suggested substantial falls of about one-third in before-housing poverty rates for dependent children in Australia. However, the general picture of sharp falls in before-housing poverty rates among children did not hold true for 15–18 years olds not living with their parents or for 15–18 year olds still living with their parents but not in full-time study. For these two groups the chance of being in before-housing poverty increased very sharply during the period under study.

Since 1982 there have been very substantial real increases in assistance provided to families with children — in rent assistance and in real social security pension levels. The impact of these changes was clearly evident in the data, with dramatic falls in the before-housing poverty rates of children living in sole parent families, families dependent on government cash benefits and families living in private rental accommodation.

However, this rosy picture was gained when looking at poverty among children before their parents had met their housing costs. Admittedly, most studies of poverty concentrate on before-housing poverty. And the

poverty league tables for OECD countries are invariably on a before-housing basis. [The Australian results of a fall in child poverty contrast favourably with the rise in before-housing child poverty in 12 industrialised countries — including the United States, the United Kingdom, Germany, the Netherlands, Italy and Belgium — identified in a recent international comparative study (Bradbury and Jantii 1998, p. 12).] Nonetheless, there is a case for arguing that where the data permit it poverty should also be examined on an after-housing basis.

Using after-housing poverty measures, dependent child poverty had fallen by only 1 or 2 percentage points rather than the 5 or 6 percentage points apparent when looking at before-housing measures. This is still a significant achievement during an era of rising earnings inequality which, without countervailing tax and social security measures, would have tended to lead to increased disposable income inequality and poverty.

Examination of the data suggested that some rent assistance recipients might have either decided to rent slightly better accommodation and/or some part of the benefit of higher rent assistance might have shifted to landlords. But this did not seem to be the key part of the story, although further work is needed to fully understand what happened.

There appeared to be a compositional shift in the characteristics of children in after-housing poverty, with children living in self-employed and social security dependent households moving out of poverty and those living in wage earning households moving in. Children living in wage earning households experienced far greater increases in their housing costs than did children living in other types of family, primarily because their families were purchasing their homes and grappling with relatively high mortgage repayments. Thus, in both the before-housing and after-housing poverty estimates there was some evidence that the working poor were increasingly represented.

# A Detailed tables

Table A1 **Before-housing child poverty rates by family characteristics using the Henderson, half average, half median and OECD poverty lines, 1982 and 1995-96**

| | Henderson | | Half average | | Half median | | OECD | |
|---|---|---|---|---|---|---|---|---|
| | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 |
| | % | % | % | % | % | % | % | % |
| **Gender of reference person** | | | | | | | | |
| Male | 16 | 21 | 16 | 11 | 11 | 7 | 13 | 9 |
| Female | 50 | 43 | 46 | 20 | 33 | 12 | 41 | 18 |
| **Age of reference person** | | | | | | | | |
| 20–24 years | 27 | 32 | 24 | 16 | 14 | 10 | 25 | 15 |
| 25–29 years | 22 | 25 | 21 | 14 | 14 | 10 | 20 | 14 |
| 30–34 years | 19 | 29 | 18 | 13 | 13 | 9 | 15 | 12 |
| 35–39 years | 20 | 24 | 19 | 13 | 14 | 8 | 16 | 10 |
| 40–44 years | 19 | 22 | 18 | 13 | 12 | 9 | 15 | 10 |
| 45–49 years | 18 | 19 | 17 | 8 | 13 | 6 | 14 | 7 |
| 50–54 years | 16 | 19 | 14 | 7 | 9 | 4 | 12 | 4 |
| 55–59 years | 21 | 25 | 18 | 16 | 12 | 10 | 17 | 10 |
| 60+ years | 34 | 50 | 34 | 42 | 22 | 20 | 32 | 39 |
| **Marital status of parents** | | | | | | | | |
| Married or de-facto | 17 | 21 | 16 | 11 | 11 | 7 | 14 | 9 |
| Separated or divorced | 47 | 41 | 43 | 21 | 31 | 12 | 39 | 15 |
| Never married | 37 | 46 | 32 | 20 | 21 | 11 | 30 | 20 |
| **Child's age group** | | | | | | | | |
| 0–4 years | 18 | 24 | 17 | 12 | 12 | 8 | 17 | 11 |
| 5–9 years | 20 | 27 | 20 | 15 | 14 | 9 | 17 | 12 |
| 10–14 years | 21 | 25 | 19 | 13 | 14 | 8 | 16 | 10 |
| 15–18 years | 18 | 21 | 17 | 11 | 13 | 7 | 14 | 7 |
| 19–24 years | 9 | 13 | 9 | 5 | 6 | 3 | 6 | 5 |
| **Number of children in the family** | | | | | | | | |
| One | 14 | 19 | 13 | 11 | 8 | 7 | 9 | 7 |
| Two | 15 | 19 | 14 | 11 | 10 | 7 | 12 | 8 |
| Three | 21 | 26 | 20 | 12 | 15 | 8 | 17 | 10 |
| Four | 31 | 39 | 29 | 21 | 20 | 13 | 26 | 22 |
| Five or more | 52 | 50 | 50 | 19 | 37 | 9 | 49 | 23 |

(Continued on next page)

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Table A1 **Before-housing child poverty rates by family characteristics using the Henderson, half average, half median and OECD poverty lines, 1982 and 1995-96** (continued)

| | Henderson | | Half average | | Half median | | OECD | |
|---|---|---|---|---|---|---|---|---|
| | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 |
| | % | % | % | % | % | % | % | % |
| **Number of parental earners in the household** | | | | | | | | |
| Nil | 73 | 68 | 69 | 36 | 50 | 21 | 68 | 31 |
| One | 11 | 19 | 11 | 9 | 7 | 6 | 9 | 8 |
| Two | 12 | 12 | 11 | 7 | 8 | 5 | 8 | 5 |
| **Principal source of current weekly income** | | | | | | | | |
| Wage & salary | 5 | 10 | 4 | 4 | 3 | 2 | 3 | 3 |
| Own business | 21 | 25 | 20 | 14 | 13 | 8 | 14 | 9 |
| Government cash benefits | 79 | 69 | 75 | 38 | 57 | 24 | 72 | 33 |
| Other [a] | 52 | 42 | 50 | 37 | 43 | 31 | 45 | 36 |
| **Tenure type** | | | | | | | | |
| Owner | 21 | 20 | 19 | 13 | 14 | 6 | 15 | 10 |
| Purchaser | 12 | 16 | 11 | 9 | 8 | 16 | 10 | 7 |
| Public renter | 44 | 61 | 42 | 27 | 27 | 19 | 39 | 23 |
| Private renter | 30 | 33 | 27 | 15 | 19 | 27 | 24 | 13 |
| Other [b] | 33 | 36 | 31 | 15 | 24 | 11 | 33 | 20 |
| **State of usual residence** | | | | | | | | |
| New South Wales | 20 | 25 | 19 | 13 | 14 | 8 | 17 | 11 |
| Victoria | 19 | 23 | 19 | 11 | 13 | 6 | 17 | 8 |
| Queensland | 21 | 25 | 20 | 13 | 14 | 9 | 16 | 12 |
| South Australia | 17 | 25 | 16 | 13 | 11 | 9 | 14 | 11 |
| Western Australia | 19 | 25 | 17 | 14 | 13 | 10 | 14 | 13 |
| Tasmania | 18 | 25 | 17 | 12 | 10 | 6 | 14 | 8 |
| Australian Capital Territory & Northern Territory [c] | 11 | 20 | 11 | 10 | 9 | 8 | 10 | 8 |
| **Reference person's country of birth** | | | | | | | | |
| Australia | 19 | 23 | 18 | 12 | 12 | 8 | 15 | 10 |
| Other Oceania | 24 | 32 | 24 | 14 | 19 | 10 | 23 | 13 |
| Europe & former USSR | 19 | 22 | 17 | 13 | 13 | 8 | 15 | 9 |
| Middle East & North Africa | 47 | 51 | 45 | 21 | 31 | 7 | 45 | 20 |
| All of Asia | 22 | 29 | 21 | 15 | 15 | 9 | 18 | 13 |
| Northern America | 30 | 13 | 30 | 13 | 26 | 13 | 26 | 11 |
| South & Central America | 11 | 39 | 11 | 28 | 1 | 21 | 13 | 20 |
| Rest of Africa | 28 | 19 | 28 | 12 | 28 | 10 | 28 | 11 |

[a] Includes incomes from partnerships, superannuation, interest, dividends, bonds and rent. Some families had zero income and thus did not have a principal income source. [b] Includes rent-free and board-free. [c] Australian Capital Territory and Northern Territory are not identified separately in the ABS state breakdown.

*Sources*: ABS 1982 Income and Housing Survey; ABS 1994–96 Survey of Income and Housing Costs.



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Table A2 **Before-housing number of children in poverty by family characteristics using the Henderson, half average, half median and OECD poverty lines, 1982 and 1995-96**

| | Henderson | | Half average | | Half median | | OECD | |
|---|---|---|---|---|---|---|---|---|
| | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 |
| | '000 | '000 | '000 | '000 | '000 | '000 | '000 | '000 |
| **Gender of reference person** | | | | | | | | |
| Male | 622 | 866 | 587 | 456 | 420 | 303 | 508 | 368 |
| Female | 187 | 297 | 171 | 142 | 123 | 85 | 154 | 123 |
| **Age of reference person** | | | | | | | | |
| 20–24 years | 29 | 50 | 26 | 19 | 15 | 12 | 27 | 18 |
| 25–29 years | 92 | 94 | 89 | 52 | 61 | 38 | 84 | 50 |
| 30–34 years | 164 | 252 | 155 | 115 | 113 | 74 | 134 | 106 |
| 35–39 years | 204 | 292 | 193 | 160 | 145 | 96 | 162 | 119 |
| 40–44 years | 152 | 242 | 141 | 142 | 97 | 99 | 120 | 13 |
| 45–49 years | 83 | 133 | 80 | 59 | 62 | 41 | 67 | 48 |
| 50–54 years | 41 | 55 | 36 | 19 | 23 | 10 | 32 | 11 |
| 55–59 years | 22 | 20 | 19 | 13 | 13 | 8 | 18 | 8 |
| 60+ years | 21 | 22 | 19 | 19 | 13 | 9 | 19 | 17 |
| **Marital status of parents** | | | | | | | | |
| Married or de-facto | 619 | 835 | 585 | 436 | 419 | 295 | 505 | 364 |
| Separated or divorced | 166 | 240 | 153 | 124 | 111 | 71 | 137 | 90 |
| Never married | 25 | 87 | 22 | 39 | 14 | 21 | 20 | 38 |
| **Child's age group** | | | | | | | | |
| 0–4 years | 190 | 311 | 180 | 152 | 123 | 107 | 175 | 147 |
| 5–9 years | 238 | 359 | 229 | 192 | 164 | 123 | 195 | 157 |
| 10–14 years | 271 | 327 | 248 | 169 | 177 | 105 | 209 | 129 |
| 15–18 years | 100 | 144 | 92 | 76 | 72 | 47 | 76 | 50 |
| 19–24 years | 11 | 22 | 10 | 9 | 7 | 5 | 7 | 8 |
| **Number of children in the family** | | | | | | | | |
| One | 105 | 171 | 97 | 96 | 57 | 62 | 71 | 64 |
| Two | 245 | 388 | 228 | 216 | 165 | 138 | 204 | 156 |
| Three | 244 | 340 | 231 | 154 | 175 | 105 | 199 | 134 |
| Four | 118 | 175 | 108 | 95 | 77 | 60 | 97 | 97 |
| Five or more | 98 | 89 | 94 | 34 | 70 | 17 | 92 | 41 |

(Continued on next page)

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Table A2 **Before-housing numbers of children in poverty by family characteristics using the Henderson, half average, half median and OECD poverty lines, 1982 and 1995-96** (continued)

| | Henderson | | Half average | | Half median | | OECD | |
|---|---|---|---|---|---|---|---|---|
| | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 |
| | '000 | '000 | '000 | '000 | '000 | '000 | '000 | '000 |
| **Number of parental earners in the household** | | | | | | | | |
| Nil | 389 | 550 | 365 | 288 | 263 | 160 | 359 | 253 |
| One | 237 | 350 | 217 | 170 | 148 | 118 | 180 | 139 |
| Two | 184 | 262 | 178 | 141 | 133 | 101 | 124 | 100 |
| **Principal source of current weekly income** | | | | | | | | |
| Wage & salary | 137 | 314 | 122 | 117 | 70 | 78 | 90 | 89 |
| Own business | 162 | 121 | 152 | 66 | 103 | 40 | 109 | 46 |
| Government cash benefits | 467 | 692 | 442 | 383 | 334 | 243 | 426 | 325 |
| Other [a] | 44 | 36 | 42 | 32 | 36 | 31 | 39 | 31 |
| **Tenure type** | | | | | | | | |
| Owner | 194 | 257 | 184 | 158 | 131 | 73 | 144 | 122 |
| Purchaser | 251 | 345 | 235 | 187 | 179 | 354 | 203 | 144 |
| Public renter | 115 | 219 | 110 | 98 | 70 | 67 | 101 | 84 |
| Private renter | 191 | 294 | 176 | 135 | 122 | 243 | 156 | 116 |
| Other [b] | 58 | 48 | 55 | 20 | 43 | 15 | 58 | 26 |
| **State of usual residence** | | | | | | | | |
| New South Wales | 288 | 402 | 269 | 215 | 196 | 136 | 238 | 174 |
| Victoria | 213 | 281 | 205 | 132 | 145 | 73 | 284 | 96 |
| Queensland | 136 | 214 | 127 | 110 | 99 | 85 | 104 | 100 |
| South Australia | 64 | 90 | 58 | 47 | 42 | 31 | 52 | 41 |
| Western Australia | 73 | 117 | 66 | 65 | 48 | 44 | 56 | 59 |
| Tasmania | 22 | 32 | 22 | 16 | 13 | 8 | 18 | 10 |
| Australian Capital Territory & Northern Territory [c] | 12 | 26 | 12 | 13 | 9 | 10 | 11 | 10 |
| **Reference person's country of birth** | | | | | | | | |
| Australia | 541 | 795 | 504 | 407 | 359 | 286 | 438 | 335 |
| Other Oceania | 13 | 41 | 13 | 17 | 10 | 12 | 12 | 16 |
| Europe & former USSR | 186 | 166 | 173 | 92 | 125 | 59 | 149 | 68 |
| Middle East & North Africa | 32 | 68 | 30 | 28 | 21 | 10 | 30 | 27 |
| All of Asia | 28 | 73 | 28 | 37 | 22 | 23 | 23 | 32 |
| Northern America | 5 | 3 | 6 | 3 | 5 | 3 | 5 | 3 |
| South & Central America | 2 | 11 | 2 | 8 | 0.2 | 5 | 3 | 6 |
| Rest of Africa | 3 | 7 | 3 | 4 | 3 | 4 | 3 | 4 |

[a] Includes incomes from partnerships, superannuation, interest, dividends, bonds and rent. Some families had zero income and thus did not have a principal income source. [b] Includes rent-free and board-free. [c] Australian Capital Territory and Northern Territory are not identified separately in the ABS state breakdown.

*Sources*: ABS 1982 Income and Housing Survey; ABS 1994–96 Survey of Income and Housing Costs.

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Table A3 **After-housing child poverty rates by family characteristics using the Henderson, half average, half median and OECD poverty lines, 1982 and 1995-96**

| | Henderson | | Half average | | Half median | | OECD | |
|---|---|---|---|---|---|---|---|---|
| | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 |
| | % | % | % | % | % | % | % | % |
| **Tenure type** | | | | | | | | |
| Owned outright | 12 | 13 | 17 | 10 | 11 | 6 | 12 | 7 |
| Purchaser | 15 | 25 | 19 | 21 | 15 | 16 | 15 | 16 |
| Public renter | 37 | 44 | 45 | 30 | 37 | 19 | 45 | 26 |
| Private renter | 32 | 41 | 37 | 36 | 31 | 27 | 33 | 32 |
| Other [a] | 21 | 14 | 24 | 14 | 19 | 11 | 20 | 11 |
| **Principal source of current income** | | | | | | | | |
| Wage & salary | 6 | 13 | 8 | 11 | 5 | 7 | 5 | 7 |
| Own business | 22 | 27 | 28 | 22 | 22 | 16 | 19 | 15 |
| Government cash benefits | 71 | 64 | 80 | 54 | 69 | 40 | 78 | 50 |
| Other | 44 | 43 | 48 | 41 | 43 | 36 | 46 | 36 |
| **Gender of reference person** | | | | | | | | |
| Male | 16 | 23 | 20 | 19 | 16 | 14 | 16 | 14 |
| Female | 45 | 43 | 53 | 34 | 43 | 25 | 50 | 33 |
| **Marital status of parents** | | | | | | | | |
| Married or de-facto | 16 | 23 | 20 | 19 | 16 | 14 | 16 | 14 |
| Separated or divorced | 42 | 39 | 50 | 33 | 41 | 25 | 27 | 28 |
| Never married | 30 | 36 | 34 | 33 | 30 | 22 | 37 | 38 |
| **Child's age group** | | | | | | | | |
| 0–4 years | 19 | 27 | 23 | 23 | 18 | 17 | 22 | 21 |
| 5–9 years | 20 | 30 | 24 | 25 | 19 | 18 | 20 | 19 |
| 10–14 years | 20 | 25 | 24 | 21 | 19 | 14 | 19 | 15 |
| 15–18 years | 17 | 20 | 20 | 17 | 16 | 13 | 15 | 11 |
| 19–24 years | 8 | 14 | 10 | 10 | 8 | 9 | 7 | 8 |
| **Number of children in the family** | | | | | | | | |
| One | 12 | 21 | 15 | 18 | 12 | 14 | 14 | 15 |
| Two | 15 | 22 | 18 | 18 | 14 | 13 | 15 | 14 |
| Three | 21 | 29 | 25 | 24 | 20 | 19 | 20 | 20 |
| Four | 30 | 36 | 35 | 30 | 29 | 19 | 29 | 29 |
| Five or more | 44 | 42 | 57 | 33 | 43 | 21 | 49 | 32 |
| **Number of parental earners in the family** | | | | | | | | |
| Nil | 64 | 62 | 74 | 53 | 62 | 38 | 74 | 50 |
| One | 12 | 23 | 15 | 18 | 11 | 13 | 12 | 14 |
| Two | 12 | 15 | 15 | 12 | 12 | 9 | 10 | 7 |

[a] Includes rent-free and board-free.

*Sources:* ABS 1982 Income and Housing Survey; ABS 1994–96 Survey of Income and Housing Costs.

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Table A4 **After-housing number of children in poverty by family characteristics using the Henderson, half average, half median and OECD poverty lines, 1982 and 1995-96**

| | Henderson | | Half average | | Half median | | OECD | |
|---|---|---|---|---|---|---|---|---|
| | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 | 1982 | 1995-96 |
| | '000 | '000 | '000 | '000 | '000 | '000 | '000 | '000 |
| **Tenure type** | | | | | | | | |
| Owned outright | 114 | 159 | 156 | 120 | 106 | 73 | 111 | 83 |
| Purchaser | 328 | 534 | 397 | 460 | 314 | 354 | 313 | 339 |
| Public renter | 98 | 159 | 117 | 109 | 97 | 67 | 118 | 92 |
| Private renter | 202 | 369 | 234 | 326 | 298 | 243 | 212 | 283 |
| Other [a] | 38 | 19 | 42 | 18 | 35 | 15 | 36 | 15 |
| **Principal source of current income** | | | | | | | | |
| Wage & salary | 151 | 432 | 223 | 367 | 139 | 237 | 144 | 210 |
| Own business | 170 | 132 | 210 | 106 | 165 | 80 | 147 | 72 |
| Government cash benefits | 420 | 639 | 473 | 544 | 409 | 404 | 459 | 500 |
| Other | 38 | 37 | 41 | 35 | 37 | 30 | 40 | 31 |
| **Gender of reference person** | | | | | | | | |
| Male | 612 | 944 | 747 | 794 | 587 | 575 | 600 | 584 |
| Female | 168 | 295 | 199 | 239 | 162 | 177 | 189 | 229 |
| **Marital status of parents** | | | | | | | | |
| Married or de-facto | 610 | 921 | 745 | 776 | 585 | 565 | 598 | 573 |
| Separated or divorced | 149 | 232 | 178 | 193 | 144 | 145 | 166 | 167 |
| Never married | 20 | 87 | 23 | 64 | 20 | 42 | 25 | 72 |
| **Child's age group** | | | | | | | | |
| 0–4 years | 194 | 359 | 337 | 299 | 188 | 219 | 228 | 280 |
| 5–9 years | 229 | 392 | 283 | 327 | 220 | 239 | 231 | 253 |
| 10–14 years | 257 | 325 | 308 | 272 | 247 | 190 | 244 | 193 |
| 15–18 years | 89 | 140 | 107 | 116 | 85 | 88 | 79 | 74 |
| 19–24 years | 9 | 24 | 10 | 17 | 9 | 15 | 8 | 14 |
| **Number of children in the family** | | | | | | | | |
| One | 94 | 188 | 116 | 156 | 92 | 123 | 104 | 132 |
| Two | 248 | 443 | 300 | 368 | 237 | 266 | 246 | 286 |
| Three | 243 | 372 | 291 | 316 | 232 | 242 | 237 | 253 |
| Four | 112 | 162 | 132 | 135 | 108 | 84 | 110 | 85 |
| Five or more | 84 | 75 | 107 | 58 | 81 | 37 | 93 | 57 |
| **Number of parental earners in the family** | | | | | | | | |
| Nil | 339 | 501 | 391 | 427 | 330 | 310 | 390 | 407 |
| One | 247 | 415 | 316 | 338 | 234 | 241 | 250 | 248 |
| Two | 193 | 324 | 240 | 268 | 186 | 201 | 150 | 158 |

[a] Includes rent-free and board-free.

*Sources:* ABS 1982 Income and Housing Survey; ABS 1994–96 Survey of Income and Housing Costs.

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## References

ABS (Australian Bureau of Statistics) 1998, 'Poverty: different assumptions, different profiles', *Australian Social Trends*, Canberra, pp. 125–9.

Borland, J. and Kennedy, S. 1998, *Earnings Inequality in Australia in the 1980s and the 1990s*, Discussion Paper no. 389, Centre for Economic Policy Research, Australian National University, Canberra.

Bradbury, B. 1996, *Are the Low-Income Self-Employed Poor?*, SPRC Discussion Paper no. 73, Social Policy Research Centre, University of New South Wales, Sydney.

—— and Jantti, M. 1998, Child poverty across industrialised nations, Paper presented at the 25th General Conference of the International Association for Research in Income and Wealth, Cambridge, England, 23–29 August.

Brownlee, H. and King, A. 1989, 'The estimated impact of the family package on child poverty', in Edgar, D., Keane, D. and McDonald, P. (eds), *Child Poverty in Australia*, Allen & Unwin, Sydney, pp. 123–45.

Citro, C.F. and Michael, R. (eds) 1995, *Measuring Poverty — A New Approach* National Research Council, National Academy Press, Washington, DC.

Eardley, T. 1998, *Working but Poor*, SPRC Discussion Paper no. 91, Social Policy Research Centre, University of New South Wales, Sydney.

Federal Interagency Forum on Child and Family Statistics 1998, *America's Children: Key National Indicators of Well-Being*, Federal Interagency Forum on Child and Family Statistics, Washington, DC.

Harding, A. 1993, 'New estimates of poverty and income distribution in 1990: the effects of reweighting the 1990 income distribution survey', in Saunders, P. and Shaver, S. (eds), *Theory and Practice in Australian Social Policy: Rethinking the Fundamentals* (Proceedings of the National Social Policy Conference, 14–16 July 1993), vol. 2, *Contributed Papers*, SPRC Reports and Proceedings no. 112, University of New South Wales, Sydney, pp. 203–24.

—— 1995, 'The impact of health education and housing outlays on income distribution in Australia in the 1990s', *Australian Economic Review*, 3rd quarter, pp. 71–86.

—— 1996, 'Recent trends in income inequality in Australia' in Sheehan, P., Grewalm B. and Kummick, M. (eds), *Dialogues on Australia's Future*, Centre

for Strategic Economic Studies, Victoria University, Melbourne, pp. 283–306.

—— 1997, 'The suffering middle: trends in income inequality in Australia, 1982 to 1993-94', *Australian Economic Review*, vol. 30, no. 4, pp. 341–58.

—— and Szukalska, A. 1998, A portrait of child poverty in Australia in 1995-96, Paper presented at the 6th Australian Institute of Family Studies Conference, Melbourne, 26 November.

Johnson, D. 1998, 'Incorporating non-cash income and expenditure in the measurement of inequality and poverty', in Eckersley, R. (ed.), *Measuring Progress — Is Life Getting Better?*, CSIRO, Melbourne, pp. 255–66.

——, Manning, I. and Hellwig, O. 1995, *Trends in the Distribution of Cash Income and Non-cash Benefits*, Report to the Department of Prime Minister and Cabinet, AGPS, Canberra.

King, A. 1991, 'The incidence of child poverty since 1986', in Carter, J. (ed.), *Measuring Child Poverty*, Child Poverty Policy Review 6, Brotherhood of St. Laurence, Melbourne.

—— 1998, 'Income poverty since the early 1970s', in Fincher, R. and Nieuwenhuysen, J. (eds), *Australian Poverty: Then and Now*, Melbourne University Press, pp. 71–102.

Landt, J. and King, A. 1996, 'Poverty in Australia', *Income Distribution Report* (National Centre for Social and Economic Modelling, University of Canberra), no. 4, pp. 1–5..

—— and Scott, P. 1998, 'Youth incomes', in *Australia's Youth: Reality and Risk — A National Perspective on Developments That Have Affected 15–19 Year Olds During the 1990s*, Dusseldorp Skills Forum, Sydney, pp. 127–39.

Martina, A. and Rajaratnam, N. 1994, *A Disadvantaged Approach to the Ranking of Social Welfare and Poverty Levels: An Application to Australian Data*, Discussion Paper no. 323, Centre for Economic Policy Research, Australian National University, Canberra.

Mitchell, D. and Harding, A. 1993, 'The efficiency and effectiveness of the tax–transfer system in the 1980s: a rejoinder', *Australian Tax Forum*, vol. 10, no. 3, pp. 403–16.

Rodgers, B. and Pryor, J. 1998, *Divorce and Separation — The Outcomes for Children*, Joseph Rowntree Foundation, York.

Saunders, P. 1996, 'Poverty in the 1990s — a challenge to work and welfare', in Sheehan, P., Grewal, B. and Kummick, M. (eds), *Dialogues on Australia's Future — In Honour of the Late Professor Ronald Henderson*, Centre for Strategic Economic Studies, Victoria University, Melbourne, pp. 325–50.

—— 1998a, 'The role of indicators of income poverty in the measurement of national progress', in Eckersley, R. (ed.), *Measuring Progress: Is Life Getting Better?*, CSIRO Publishing, Melbourne, pp 223–37.

—— 1998b, *Using Budget Standards to Assess the Well-Being of Families*, SPRC Discussion Paper no. 93, Social Policy Research Centre, University of New South Wales, Sydney.

—— and Whiteford, P. 1987, *Ending Child Poverty — An Assessment of the Government's Family Package*, Social Welfare Research Centre, University of New South Wales, Sydney.

Smeeding, T., Saunders, P., Coder, J., Jenkins, S., Fritzell, J., Hagenaars, A., Hauser, R. and Wolfson, M. 1993, 'Poverty, inequality and family living standards impacts across seven nations: the effects of noncash subsidies for health, education and housing', *Review of Income and Wealth*, vol. 39, no. 3, pp. 229–57.

Travers, P. and Richardson, S. 1993, *Living Decently: Material Well-Being in Australia*, Oxford University Press, Melbourne.

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